

To: loven, Dawn[loven.Dawn@epa.gov]
From: Markiewicz, Karl
Sent: Wed 2/5/2014 11:08:13 AM
Subject: Fw: Formaldehyde - Shower Model

Hello Dawn,

You're the best :-)

K

From: Werner, Lora S. (ATSDR/DCHI/EB) <lkw9@cdc.gov>
Sent: Tuesday, February 04, 2014 9:15:53 PM
To: loven, Dawn
Cc: Helverson, Robert (ATSDR/DCHI/EB); Markiewicz, Karl (ATSDR/DCHI/EB)
Subject: RE: Formaldehyde - Shower Model

Dawn, I can't thank you enough for giving such a clear answer to Dr. Tierney. I understand from Fran this really wasn't straightforward tonight. I am sorry it was a long evening, but I know Dr. Tierney will truly appreciate this!

Thanks again. Lora

From: loven, Dawn [mailto:loven.Dawn@epa.gov]
Sent: Tuesday, February 04, 2014 8:29 PM
To: letitia.tierney@wv.gov
Cc: Werner, Lora S. (ATSDR/DCHI/EB); Hodgkiss, Kathy; Burns, Francis
Subject: Formaldehyde - Shower Model

Hi, Dr. Tierney. I performed risk calculations for formaldehyde under a shower exposure scenario. The model is very conservative, and assumes that exposure occurs daily (with 30 minutes spent in the shower and 60 minutes spent in the shower room) for 30 years. Under this scenario, 55 mg/L (ppm) of formaldehyde in water would yield an air concentration that poses an excess cancer risk of 45 in one million and a non-cancer Hazard Quotient of 1. (The Hazard Quotient is a measure of non-cancer health risks associated with exposure. A Hazard Quotient of 1 or less indicates that non-cancer threats would not be expected to occur. In terms of cancer risk, EPA typically considers taking action when risks exceed 100 in 1 million.) **Consequently, formaldehyde concentrations in tap water would have to be greater than 55 ppm for the potential for harm to exist in sensitive subpopulations under a long-term shower exposure scenario.**

If you have any questions about these calculations, please call my home Ex. 6 - Personal Privacy
Ex. 6 - Personal Privacy I am available tonight and tomorrow. Thanks for
your patience.

Dawn

Dawn A. Ioven, toxicologist

U.S. EPA - Region III

(3HS41)

1650 Arch Street

Philadelphia, PA 19103

215.814.3320